Notice of Allowability	Application No.	Applicant(s)	
	10/519,693	KOBAYASHI ET AL.	
	Examiner	Art Unit	
	VAN T. PHAM	2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *6/15/2006*.

2. ☒ The allowed claim(s) is/are *1-3 and 5-7, have been renumberred as 1-6, respectively*.

3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☒ All b) ☐ Some* c) ☐ None of the:
      1. ☒ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

WAYNE YOUNG
SUPERVISORY PATENT EXAMINER

Response to Arguments

1. Applicant's arguments, see Remarks, filed 6/20/2006, with respect to claims 1-3, and 5-7 have been fully considered and are persuasive. The rejection of 112 first has been withdrawn.

Drawings

2. The drawings were received on 6/15/2006. These drawings are acceptable.

Allowable Subject Matter

3. The following is an examiner's statement of reasons for allowance:

Takeda, see Figs. 9-14, discloses a method for determining a power of a laser beam which is adapted for determining a recording power of the laser beam to be projected onto a data rewritable type optical recording medium for recording data therein, which comprises steps of projecting the laser beam onto a first track, a second track and a third track in this order formed on the data rewritable type optical recording medium to be adjacent with each other while varying a level of the recording power of the laser beam (see [0028] and [0072]), thereby recording a first test signal; reproducing the first test signal recorded on the second track, measuring, for each of the levels of the recording power of the laser beam, jitter JJ1 of the thus reproduced signal (see Figs. 10-13); reproducing the first test signal recorded on the third track, measuring jitter JJ0 of the thus reproduced signal, projecting the laser beam onto the first track and the third track y times where y is a positive integer, thereby directly overwriting the first test signal recorded on the first track and the first test signal recorded on the third track with the first test signal, reproducing the first test signal recorded on the second track, measuring jitter JJ(n+1) of the thus reproduced signal where n is an integer equal to or larger than 0 and equal to or smaller than y, obtaining, for each of the levels of the recording power of the laser beam, a

value of no of n at which a function of a difference between JJ(n+1) and JJ0 becomes constant, determining the maximum value of nc as the number of times x of the direct overwriting required for saturating an influence of cross erasing of data on the first test signal recorded on the second track by directly overwriting the first test signal recorded on the first track and the first test signal recorded on the third track with the first test signal (see [0066], abstract and Figs.1-14).

None of the cited references disclose or suggest setting the recording power of the laser beam to a predetermined level, projecting the laser beam onto a fourth track, a fifth track and a sixth track in this order formed on the data rewritable type optical recording medium to be adjacent with each other, thereby recording a second test signal thereon, reproducing the second test signal recorded on the fifth track, measuring an amplitude A1 and jitter J1 of the thus reproduced signal, reproducing the second test signal recorded on the sixth track, measuring an amplitude A0 of the thus reproduced signal, calculating, for each of the levels of the recording power of the laser beam, a first parameter as a function of a difference between the amplitude A0 of the reproduced signal obtained from the sixth track and the amplitude A1 of the reproduced signal obtained from the fifth track; directly overwriting the second test signal recorded on the fourth track and the second test signal recorded on the sixth track with the second test signal x times, reproducing the second test signal recorded on the fifth track, measuring an amplitude A(x+1) and jitter J(x+1) of the thus reproduced signal, calculating, for each of the levels of the recording power of the laser beam, a second parameter as a function of a difference between the amplitude A1 of the reproduced signal and the amplitude A(x+1) of the reproduced signal, calculating a third parameter as a function of a difference between the

jitter J(x+1) of the reproduced signal and the jitter J1 of the reproduced signal, obtaining a value of the first parameter corresponding to a value of the second parameter when the third parameter is equal to a tolerance, thereby determining a critical parameter, recording a third test signal in the data rewritable type optical recording medium while varying levels of the recording power of the laser beam, measuring, when signal characteristics of a reproduced signal obtained by reproducing the third signal recorded in the data rewritable type optical recording medium satisfy reference conditions, an amplitude D3 of a reproduced signal obtained by reproducing the third test signal before the third test signal is influenced by cross erasing of data and an amplitude D2 of a reproduced signal obtained by reproducing the third test signal after the third test signal was once influenced by cross erasing of data for each of the levels of the recording power of the laser beam, calculating, based on the amplitude D2 of the reproduced signal and the amplitude D3 of the reproduced signal obtained by reproducing the third test signals, a fourth parameter as a function of a difference between the amplitude D3 of the reproduced signal obtained by reproducing the third test signal before the third test signal is influenced by cross erasing of data and the amplitude D2 of the reproduced signal obtained by reproducing the third test signal after the third test signal was once influenced by cross erasing of data; and comparing the critical parameter and the fourth parameter, and determining the recording power of the laser beam at which the fourth parameter was obtained as an optical recording power when the fourth parameter is equal to or smaller than the critical parameter.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Cited References

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The cited references relate to:

a. Recording power adjusting method and optical information record apparatus using the same (Okubo et al. US 2003/0147321).

b. Optical disc apparatus and information recording apparatus using the optical disc apparatus (Shiozawa et al. US 6,765850).

c. Optical disk apparatus having optimized focus shift mechanism control (Matsumoto et al. US 5,828636).

d. Information recording method and optical disc apparatus (Ushiyama et al. US 2002/01763338).

e. Optical disc apparatus (Takeda US 6,898,163).

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VAN T. PHAM whose telephone number is 571-272-7590. The examiner can normally be reached on Monday – Thursday from 9:00-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on 571-272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VP

WAYNE YOUNG
SUPERVISORY PATENT EXAMINER